

Project Information

Company: AOP

Project Description

General Info

Project #:	2
Project Name:	AOP Fiber
Total Project Cost:	4,000,000.00
Total project cost per prospective broadband recipient:	1,867.41
Infrastructure cost per prospective broadband recipient:	1,867.41
Number of households to be served:	2142
Number of businesses to be served:	332
GUMBO cost per prospective broadband recipient:	1,400.56
Number of GUMBO households to be served:	2142
Number of GUMBO businesses to be served:	332
General Location/Parishes:	Calcasieu Jefferson Davis
Base Speed (Minimum Download/Upload):	120/120
Supported Scalability Speeds (Minimum Download/Upload):	1000/1000

Qualifications and Experience:

Provide the following details:

- Number of years the applicant has provided internet services;
- A history of the number of households and consumers, by year of service, to which the applicant has provided broadband internet access, as well as the current number of households to which broadband internet access (at least 25:3 Mbps) is offered;
- The number of completed internet service infrastructure projects funded, in part, through federal or state grant programs, prior to the date of application submittal;
- Whether the applicant has ever participated in an internet service infrastructure project funded, in part, through federal or state grant programs, and if so, for each project, the nature and impact of the project, the role of the applicant, the total cost of the project, and the dollar amount of federal or state grant funding;
- The number of penalties paid by the applicant, a subsidiary or affiliate of the applicant, or the holding company of the applicant, relative to internet service infrastructure projects funded, in part, through federal or state grant programs, prior to the date of application submittal; and
- The number of times the applicant, a subsidiary or affiliate of the applicant, or the holding company of the applicant has ever been a defendant in any federal or state criminal proceeding or civil litigation as a result of its participation in an internet service infrastructure project funded, in part, through federal or state grant programs, prior to the date of application submittal

While we have provided internet services to businesses in Louisiana for over two years (and therefore, their employees who are residents), and technology solutions and services to Louisiana businesses for the entire lifetime of the company spanning over twenty years, this project marks our inaugural residential service. So we do not have household data. By the deadline of this grant application, however, we will have broken ground on the permitted construction project that kicks off our residential service offering. We have not previously participated in a publicly funded project to date, and so don't have an applicable response with respect to projects or penalties in that regard. We are not and haven't been subject to litigation related to our business and services. And have no affiliations pertinent to this application. Though we have not been the recipient of public funding, we treat our relationships with our business customers as a sacred trust, and believe this application constitutes the best value

you will see for the public's money.

Financial Background:

- Provide five years of financial statements, pro forma statements, or financial audits to ensure financial and organizational strength regarding the ability of the applicant to successfully meet the terms of the grant requirements and the ability to meet the potential repayment of grant funds. If the applicant has been in business for less than five years, provide documentation for the number of years in business
- Indicate whether the applicant, a subsidiary or affiliate of the applicant, or the holding company of the applicant has ever filed for bankruptcy

We have included in our application confidential documentation that reflects five years of financial statements that provide a look at the health, strength and durability of our business and service. We have never filed for bankruptcy and in considering our application, your office can do so in confidence not only in our history and longevity, but in our knowledge of the local landscape and our relationships with the neighbors and communities that we will serve.

Partnerships:

Provide the identity of any partners or affiliates if the applicant is proposing a project for which the applicant affirms that a formalized agreement or letter of support exists between the provider and one or more unaffiliated partners where the partner is one of the following:

- a separate private provider of broadband service, requiring a formalized agreement; or
- a nonprofit or not-for-profit, or a for-profit subsidiary of either, and the applicant is:
 - being allowed access and use of the partner's infrastructure, on special terms and conditions designed to facilitate the provision of broadband services in unserved areas, requiring a formalized agreement;
 - utilizing a matching financial and/or in-kind contribution provided by one or more partners, requiring a formalized agreement; or
 - a parish, municipality, or school board, or any instrumentality thereof, may qualify as a nonprofit for the purposes of the GUMBO grant program. Letters of support by a parish, municipality, or school board, or any instrumentality thereof, supporting an application may be submitted as part of an application. A letter of support does not require a formalized agreement.
- Provide a brief narrative explaining how the partnership or affiliation will facilitate deployment and reduce cost per prospective broadband recipient. For applications or project areas where the nonprofit or not-for-profit partner provides only matching financial support, that information can be documented in the budget section within the relevant application or project area.

From a funding perspective, we do not have partnerships related to this project, which will be solely funded by AOP, and with the grant funding provided by the State of Louisiana. We have included letters of support from the following entities who are endorsing our application: the Calcasieu Parish Police Jury, Louisiana District 36 State Representative Phillip Tarver, and the Southwest Louisiana Regional Planning Commission (SWLA-RPC) / Imperial Calcasieu Regional Planning & Development Commission (IMCAL) Louisiana Planning District 5.

For work being performed by Hudson Initiative or Veterans Initiative qualified applicants or contractors, provide documentation and/or a formalized agreement.

AOP is a veteran-owned business and also qualifies under the definition of the Hudson Initiative. While our contracts with our subcontractors are proprietary, the two with whom we will be working on this project are H2 Underground Utility Contractor, LLC and Babcock Electric LLC, both of whom qualify under the definition of the Hudson Initiative as evidenced by their inclusion in the applicable database/website. Should additional contractors be required, AOP will consult and give preference to those vendors found within the same database/site.

Project Area

Assessment of the Current Level of Broadband Access in the Proposed Deployment Area

Describe the current level of service within the area and provide the data source or methodology used to capture this information. Raw data may be submitted as part of the assessment. If data is available to support differences between advertised and transmission speeds, applicants may also submit applications for areas where transmission speeds are less than 25:3 Mbps.

AOP consulted a wide range of sources (both paid and free, both private and public) to compile the data upon which our project map was drawn. A sampling of these sources is included below. As is evident from both each individual data source disclaimers themselves and even acknowledged by the Connectivity office in its rules, the data is incomplete at best, and completely inaccurate at worst. Some of our consultation included in-person conversations at town halls with residents that contradicted given information on providers and speeds within census blocks. To that end, our project includes a drawn polygon and KMZ file that reflect our route, and includes all census blocks within that route. Based upon information that we know, we removed certain vendors whose 477 reported speeds or service we know to be inaccurate or unavailable. As for the remainder, to the extent that this is a question as to whether or not an area or census block would count as "served" under the GUMBO grant rules, there will be no question of the same at the conclusion of AOP's project. <https://www.cooperative-networks.com>
<https://broadbandnow.com/Louisiana/Lake-Charles> <https://www.policymap.com/newmaps#/>
<https://opendata.fcc.gov/Wireline/Fixed-Broadband-Deployment-Data-December-2020/hicn-aujz>
<https://broadbandusa.maps.arcgis.com/apps/webappviewer/index.html?id=ba2dcd585f5e43cba41b7c1ebf2a43d0>
https://www2.census.gov/geo/maps/DC2020/DC20BLK/st22_la/county/c22019_calcasieu/DC20BLK_C22019.pdf
<http://expressoptimizer.net/projects/DRA/speedtestmap.html>

Services

Provide a description of service options to be provided:

Service Name	Upload/download speed	Date of 1st Availability	Data Cap	# of recipients	Price
AOP Fiber	120/120	March 1, 2022	None	14442	79.00

Marketing

Provide documentation for applicant engagement to connect consumers with community education forums, multimedia advertising, and marketing programs.

All relevant marketing material will be found at <https://www.aopinc.com>, which will include detailed plan information and the links to the literacy tools supplied by the Connectivity office.

Adoption

Provide documentation that shows low-income household service offerings, digital equity or literacy support, or programs or partnerships to provide these services. The applicant should also indicate current participation in, or plans to, accept the federal Lifeline subsidy.

AOP does accept the federal Lifeline subsidy, which will serve to make our 120:120 already-affordable offering even more so for those who qualify. A link to the qualification criteria is included on our site.

Community Support

Evidence of support for the project from citizens, local government, businesses, and institutions in the community, including letters of correspondence from citizens, local government, businesses, and institutions in the community that supports the project

We have included three letters of community support, one from each of the following organizations: the Calcasieu Parish Police Jury, Louisiana District 36 State Representative Phillip Tarver, and the Southwest Louisiana Regional Planning Commission (SWLA-RPC) / Imperial Calcasieu Regional Planning & Development Commission (IMCAL) Louisiana Planning District 5.

Local Workforce

Documentation of a workforce plan prioritizing the hiring of local, Louisiana resident workers, to include a signed letter of intent with a post-secondary educational institution that is a member of the Louisiana Community and Technical College System, containing an obligation upon the applicant, and contractors or subcontractors of the applicant, to put forth a good-faith effort to hire, when possible, recent graduates of broadband-related programs.

AOP is locally owned and operated and employs a workforce largely composed of Louisiana residents. This has always been true and will remain so for this project, using local contractors with whom we have worked previously. Additionally, we are establishing a new partnership with Sowela Technical Community College to provide hands-on internship experience to students in the field, that they can retain for future use right here in our community.

Technical Report

Reporting Requirements

Explain in technical detail the technologies to be used in the proposed project and the broadband transmission speeds offered to prospective broadband recipients as a result of the project. If it would be impracticable, because of geography, topography, or excessive cost to design a broadband infrastructure project that would deliver 100:100 Mbps, the applicant must provide an explanation. Transmission speeds of 100:20 Mbps are the minimum allowable under this grant program.

AOP fiber will utilize modern versions of PON deployment in combination with DWDM and direct connections to our network. Utilizing these categories of technology, current market capacity reaches 800Gb/s, leaving ample speed allocation for Louisiana residents that will exceed the 100:100 requirement, and room for future growth.

Explain the scalability of the broadband infrastructure to be deployed to meet future bandwidth needs.

From a scalability perspective, our infrastructure has the ability to adapt to future needs, as once the single fiber strand reaches the home, the only limiting factor is the active equipment on the end. Which means that when upgrades are necessary, AOP can simply trade out end-equipment so residents can take fuller advantage of the existing fiber line, thus future-proofing our service.

Provide a proposed construction timeline and duration of the deployment project period. The deployment project period is the time from award of the grant agreement to the time that service is available to the targeted prospective broadband recipients under the grant. Describe estimated timeline, deployment roll-out and number of end-users to be served in each phase (10 percent, 35 percent, 60 percent, 85 percent, 100 percent).

Ground is to be broken within the week of the submission deadline of this application, with a projected timeline of approximately 18 months to complete the 56.8 miles of the laying of fiber. With over 14,000 residents being provided access with the completion of the project, we project that 500 will have access available with 10% of completion, with nearly 4,000 having access at the 35% point, over 8,000 at the 60% point, nearly 12,000 at the 85% and over 14,000 at completion.

Wired Infrastructure

Fixed Wireless

Wired Infrastructure Deployment Reporting Requirements

Describe the general design of the project and deployment plan and include the following:

- Explanation of the existing networks and equipment to be used for the project. If assets are owned by another entity, explain how they will be used for this project and, if applicable, provide a copy of the agreement between the applicant and the owner.
- Total number of miles of project infrastructure deployment, and the number of miles of project infrastructure deployment accounted for by preexisting infrastructure
- Detailed explanation of how the new or upgraded infrastructure will serve the prospective broadband recipients. In the case of the installation or upgrade of a specific site infrastructure, such as a point of presence or fiber hut (fiber), pedestal (cable), or a remote exchange/DSLAM (DSL), the applicant must include:
 - The number of prospective broadband recipients that will be served by that site infrastructure
 - The distance from the specific site infrastructure such as a POP, pedestal, or DSLAM to the end user(s) and the expected broadband speed that will be effectively delivered
- Detailed description of the design work needed for deployment, such as, but not limited to, pole work, acquiring or updating easements, and/or property acquisition.

Our existing network consists of Cisco and Ciena hardware, 100% owned and operated by AOP. Total number of project miles is approximately 57 miles, and approximately six additional miles of current AOP infrastructure utilized for these connections. No additional POPs (point of presence) will be added for this project. We will be utilizing our current carrier license to utilize state right-of-ways. Design will be utilizing directional drilling to construct underground fiber utilities. AOP will continue to use its current business continuity and disaster recovery plans to maintain its current 100% uptime. Our network design utilizes N+1 on all critical layers of the network.

Wired Assets

Existing Network	Existing Equipment	New/Upgraded Infrastructure	Installation Type	Num of Recipients	Avg Distance in Miles Between Prospective Recipients	Expected Speed
AOP's Existing Network	Cisco / Ciena	100% New AOP-owned Fiber	Underground	14426	0.011	120:120

Budget

Budget

The project budget should reflect all eligible project costs to be funded through the GUMBO Grant Program. Additionally, the project budget should include the minimum provider funding match of at least 20%, any local government funding match from a parish, municipality, and/or school board, or any instrumentality thereof, and the requested GUMBO Grant Program funding.

Our 56.8 mile route (approximately 300,000 feet) comes with a build cost of under \$13.00 per foot. At a total cost per resident of under \$300.00, and a cost per household of under \$1,600 (and a GUMBO cost per household of around \$1,400. NOTE: in our original submission, we noted a total cost per household of "under \$700.00". The difference between this revised final submission and the original grew out of our precision in using various sources and meticulous manual effort in supplying address point information, which was not supplied with the original submission. AOP's initial impression was that providing census block information, along with the total population and household quantities therein satisfied the original submission requirements. So these revised final numbers represent actual households unserved, even within census blocks in which data sources may indicate a level of service at or above the eligibility requirement of 25:3. In recognition of the inaccuracy of so many different sources of data, the state can take confidence in these final numbers due to AOP's above-and-beyond manual efforts from a variety of sources, including Google Maps, RDOF-funded-blocks and Cooperative Network Services (CNS) to ensure the most complete, accurate and eligible populations represented, to ensure the integrity of the provision of

funds, should they be so awarded. Additionally, we have found that speeds reflected in data sources as originally reported by internet services providers were pre-hurricane numbers, and through grassroots discussions, many residents in our census blocks have not had service speeds indicated since the hurricane; Finally, we intend to offer service to the aforementioned at updated, more modern, faster speeds, not just to unserved or greatly underserved, as we know that the existing infrastructure as has been demonstrated during conditions extremely severe and even less so, is riddled with frequent outages and throttled speeds, which is cold comfort to residents without adequate service, but on a map shown as “served”). AOP’s request of the state through the GUMBO program for \$3,000,000 in funding – coupled with AOP’s \$750,000 match (20% of the total \$3.75 million cost) and the \$250,000 groundbreaking to get the project under way and to expedite its timeline should GUMBO funding be awarded – provides value to the taxpayer and a public/private partnership that well-exceeds the minimum application requirements.

Proof of Funding Availability

Provide a signed letter of funding availability from each source of funds committed for the project. If loan or other grant funds are pledged, a loan/grant commitment letter from each source of funds must be included. Should an applicant be an awardee of Universal Service, Connect America Phase II, Rural Digital Opportunity Fund, or other federal or non-federal funds for the deployment of broadband service, the applicant shall attest as to whether or not the applicant's GUMBO application and associated project's buildout is dependent upon such awarded funds.

AOP has included a pre-approval letter of funding making available the \$750,000 budgetary portion referenced above.